§ 60.665 Reporting and recordkeeping requirements.

(a) Each owner or operator subject to §60.662 shall notify the Administrator of the specific provisions of §60.662 (§60.662 (a), (b), or (c)) with which the owner or operator has elected to comply. Notification shall be submitted with the notification of initial start-up required by §60.7(a)(3). If an owner or operator elects at a later date to use an alternative provision of §60.662 with which he or she will comply, then the Administrator shall be notified by the owner or operator 90 days before implementing a change and, upon implementing the change, a performance test shall be performed as specified by §60.664 within 180 days.

(b) Each owner or operator subject to the provisions of this subpart shall keep an up-to-date, readily accessible record of the following data measured during each performance test, and also include the following data in the report of the initial performance test required under §60.8. Where a boiler or process heater with a design heat input capacity of 44 MW (150 million Btu/hour) or greater is used to comply §60.662(a), a report containing performance test data need not be submitted, but a report containing the information in $\S60.665(b)(2)(i)$ is required. The same data specified in this section shall be submitted in the reports of all subsequently required performance tests where either the emission control efficiency of a control device, outlet concentration of TOC, or the TRE index value of a vent stream from a recovery system is determined.

(1) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with \$60.662(a) through use of either a thermal or catalytic incinerator:

(i) The average firebox temperature of the incinerator (or the average temperature upstream and downstream of the catalyst bed for a catalytic incinerator), measured at least every 15 minutes and averaged over the same time period of the performance testing, and

(ii) The percent reduction of TOC determined as specified in §60.664(b) achieved by the incinerator, or the concentration of TOC (ppmv, by compound) determined as specified in

§60.664(b) at the outlet of the control device on a dry basis corrected to 3 percent oxygen.

(2) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with \$60.662(a) through use of a boiler or process heater:

(i) A description of the location at which the vent stream is introduced into the boiler or process heater, and

(ii) The average combustion temperature of the boiler or process heater with a design heat input capacity of less than 44 MW (150 million Btu/hr) measured at least every 15 minutes and averaged over the same time period of the performance testing.

(3) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with \$60.662(b) through use of a smokeless flare, flare design (i.e., steam-assisted, air-assisted or nonassisted), all visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the performance test, continuous records of the flare pilot flame monitoring, and records of all periods of operations during which the pilot flame is absent.

(4) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with \$60.662(c):

(i) Where an absorber is the final recovery device in the recovery system, the exit specific gravity (or alternative parameter which is a measure of the degree of absorbing liquid saturation, if approved by the Administrator), and average exit temperature, of the adsorbing liquid measured at least every 15 minutes and averaged over the same time period of the performance testing (both measured while the vent stream is normally routed and constituted), or

(ii) Where a condenser is the final recovery device in the recovery system, the average exit (product side) temperature measured at least every 15 minutes and averaged over the same time period of the performance testing while the vent stream is routed and constituted normally, or

(iii) Where a carbon adsorber is the final recovery device in the recovery system, the total steam mass flow

§ 60.665

measured at least every 15 minutes and averaged over the same time period of the performance test (full carbon bed cycle), temperature of the carbon bed after regeneration (and within 15 minutes of completion of any cooling cycle(s)), and duration of the carbon bed steaming cycle (all measured while the vent stream is routed and constituted normally), or

- (iv) As an alternative to §60.665(b)(4) ((i), (ii) or (iii), the concentration level or reading indicated by the organics monitoring device at the outlet of the absorber, condenser, or carbon adsorber, measured at least every 15 minutes and averaged over the same time period of the performance testing while the vent stream is normally routed and constituted.
- (v) All measurements and calculations performed to determine the TRE index value of the vent stream.
- (c) Each owner or operator subject to the provisions of this subpart shall keep up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored under §60.663 (a) and (c) as well as up-to-date, readily accessible records of periods of operation during which the parameter boundaries established during the most recent performance test are exceeded. The Administrator may at any time require a report of these data. Where a combustion device is used to comply §60.662(a), periods of operation during which the parameter boundaries established during the most recent performance tests are exceeded are defined as follows:
- (1) For thermal incinerators, all 3-hour periods of operation during which the average combustion temperature was more than $28\,^{\circ}$ C ($50\,^{\circ}$ F) below the average combustion temperature during the most recent performance test at which compliance with \$60.662(a) was determined.
- (2) For catalytic incinerators, all 3-hour periods of operation during which the average temperature of the vent stream immediately before the catalyst bed is more than 28 $^{\circ}$ C (50 $^{\circ}$ F) below the average temperature of the vent stream during the most recent performance test at which compliance with $\S 60.662(a)$ was determined. The

owner or operator also shall record all 3-hour periods of operation during which the average temperature difference across the catalyst bed is less than 80 percent of the average temperature difference of the device during the most recent performance test at which compliance with §60.662(a) was determined.

- (3) All 3-hour periods of operation during which the average combustion temperature was more than 28 $^{\circ}$ C (50 $^{\circ}$ F) below the average combustion temperature during the most recent performance test at which compliance with \$60.662(a) was determined for boilers or process heaters with a design heat input capacity of less than 44 MW (150 million Btu/hr).
- (4) For boilers or process heaters, whenever there is a change in the location at which the vent stream is introduced into the flame zone as required under §60.662(a).
- (d) Each owner or operator subject to the provisions of this subpart shall keep up to date, readily accessible continuous records of the flow indication specified under §60.663(a)(2), §60.663(b)(2) and §60.663(c)(1), as well as up-to-date, readily accessible records of all periods when the vent stream is diverted from the control device or has no flow rate.
- (e) Each owner or operator subject to the provisions of this subpart who uses a boiler or process heater with a design heat input capacity of 44 MW or greater to comply with \$60.662(a) shall keep an up-to-date, readily accessible record of all periods of operation of the boiler or process heater. (Examples of such records could include records of steam use, fuel use, or monitoring data collected pursuant to other State or Federal regulatory requirements.)
- (f) Each owner or operator subject to the provisions of this subpart shall keep up-to-date, readily accessible continuous records of the flare pilot flame monitoring specified under §60.663(b), as well as up-to-date, readily accessible records of all periods of operations in which the pilot flame is absent.
- (g) Each owner or operator subject to the provisions of this subpart shall

keep up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored under §60.663(d), as well as up-todate, readily accessible records of periods of operation during which the parameter boundaries established during the most recent performance test are exceeded. The Administrator may at any time require a report of these data. Where an owner or operator seeks to comply with \$60.662(c), periods of operation during which the parameter boundaries established during the most recent performance tests are exceeded are defined as follows:

(1) Where an absorber is the final recovery device in a recovery system, and where an organic compound mon-

itoring device is not used:

(i) Åll 3-hour periods of operation during which the average absorbing liquid temperature was more than 11 $^{\circ}$ C (20 $^{\circ}$ F) above the average absorbing liquid temperature during the most recent performance test, or

- (ii) All 3-hour periods of operation during which the average absorbing liquid specific gravity was more than 0.1 unit above, or more than 0.1 unit below, the average absorbing liquid specific gravity during the most recent performance test (unless monitoring of an alternative parameter, which is a measure of the degree of absorbing liquid saturation, is approved by the Administrator, in which case he will define appropriate parameter boundaries and periods of operation during which they are exceeded).
- (2) Where a condenser is the final recovery device in a system, and where an organic compound monitoring device is not used, all 3-hour periods of operation during which the average exit (product side) condenser operating temperature was more than 6 °C (1 1°F) above the average exit (product side) operating temperature during the most recent performance test.
- (3) Where a carbon adsorber is the final recovery device in a system, and where an organic compound monitoring device is not used:
- (i) All carbon bed regeneration cycles during which the total mass steam flow was more than 10 percent below the total mass steam flow during the most recent performance test, or

- (ii) All carbon bed regeneration cycles during which the temperature of the carbon bed after regeneration (and after completion of any cooling cycle(s)) was more than 10 percent greater than the carbon bed temperature (in degrees Celsius) during the most recent performance test.
- (4) Where an absorber, condenser, or carbon adsorber is the final recovery device in the recovery system and where an organic compound monitoring device is used, all 3-hour periods of operation during which the average organic compound concentration level or reading of organic compounds in the exhaust gases is more than 20 percent greater than the exhaust gas organic compound concentration level or reading measured by the monitoring device during the most recent performance test.
- (h) Each owner or operator of an affected facility subject to the provisions of this subpart and seeking to demonstrate compliance with §60.662(c) shall keep up-to-date, readily accessible records of:
- (1) Any changes in production capacity, feedstock type, or catalyst type, or of any replacement, removal or addition of recovery equipment or a distillation unit;
- (2) Any recalculation of the TRE index value performed pursuant to §60.664(f); and
- (3) The results of any performance test performed pursuant to the methods and procedures required by \$60.664(d).
- (i) Each owner or operator of an affected facility that seeks to comply with the requirements of this subpart by complying with the flow rate cutoff in §60.660(c)(6) shall keep up-to-date, readily accessible records to indicate that the vent stream flow rate is less than 0.008 m³/min and of any change in equipment or process operation that increases the operating vent stream flow rate, including a measurement of the new vent stream flow rate.
- (j) Each owner or operator of an affected facility that seeks to comply with the requirements of this subpart by complying with the design production capacity provision in \$60.660(c)(5)

shall keep up-to-date, readily accessible records of any change in equipment or process operation that increases the design production capacity of the process unit in which the affected facility is located.

- (k) Each owner and operator subject to the provisions of this subpart is exempt from the quarterly reporting requirements contained in §60.7(c) of the General Provisions.
- (l) Each owner or operator that seeks to comply with the requirements of this subpart by complying with the requirements of \$60.660 (c)(4), (c)(5), or (c)(6) or \$60.662 shall submit to the Administrator semiannual reports of the following recorded information. The initial report shall be submitted within 6 months after the initial start-up date.
- (1) Exceedances of monitored parameters recorded under §60.665 (c) and (g).
- (2) All periods recorded under §60.665(d) when the vent stream is diverted from the control device or has no flow rate.
- (3) All periods recorded under §60.665(e) when the boiler or process heater was not operating.
- (4) All periods recorded under §60.665(f) in which the pilot flame of the flare was absent.
- (5) Any change in equipment or process operation that increases the operating vent stream flow rate above the flow exemption level in low §60.660(c)(6), including a measurement of the new vent stream flow rate, as recorded under §60.665(i). These must be reported as soon as possible after the change and no later than 180 days after the change. These reports may be submitted either in conjunction with semiannual reports or as a single separate report. A performance test must be completed with the same time period to verify the recalculated flow value and to obtain the vent stream characteristics of heating value and E_{TOC} . The performance test is subject to the requirements of §60.8 of the General Provisions. Unless the facility qualifies for an exemption under the low capacity exemption status in §60.660(c)(5), the facility must begin compliance with the requirements set forth in §60.662.

- (6) Any change in equipment or process operation, as recorded under §60.665(j), that increases the design production capacity above the low capacity exemption level in §60.660(c)(5) and the new capacity resulting from the change for the distillation process unit containing the affected facility. These must be reported as soon as possible after the change and no later than 180 days after the change. These reports may be submitted either in conjunction with semiannual reports or as a single seperate report. A performance test must be completed within the same time period to obtain the vent stream flow rate, heating value, E_{TOC}. The performance test is subject to the requirements of §60.8 of the General Provisions. Unless the facility qualifies for an exemption under the low flow exemption in §60.660(c)(6), the facility must begin compliance with the requirements set forth in §60.662.
- (7) Any recalculation of the TRE index value, as recorded under §60.665(h).
- (m) The requirements of \$60.665(l) remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with \$60.665(l), provided that they comply with the requirements established by the State.
- (n) Each owner or operator that seeks to demonstrate compliance with $\S 60.660(c)(5)$ must submit to the Administrator an initial report detailing the design production capcity of the process unit.
- (o) Each owner or operator that seeks to demonstrate compliance with §60.660(c)(6) must submit to the Administrator an initial report including a flow rate measurement using the test methods specified in §60.664.
- (p) The Administrator will specify appropriate reporting and record-keeping requirements where the owner or operator of an affected facility complies with the standards specified under

Environmental Protection Agency

 $\$\,60.662$ other than as provided under $\$\,60.663(a),$ (b), (c) and (d).

[55 FR 26922, June 29, 1990; 55 FR 36932, Sept. 7, 1990, as amended at 60 FR 58237, Nov. 27, 1995]

§60.666 Reconstruction.

For purposes of this subpart "fixed capital cost of the new components,' as used in §60.15, includes the fixed capital cost of all depreciable components which are or will be replaced pursuant to all continuous programs of component replacement which are commenced within any 2-year period following December 30, 1983. For purposes of this paragraph, "commenced" means that an owner or operator has undertaken a continuous program of component replacement or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of component replacement.

§ 60.667 Chemicals affected by subpart NNN.

Chemical name	CAS No.*
Acetaldehyde	75-07-0
Acetaldol	107-89-1
Acetic acid	64–19–7
Acetic anhydride	108-24-7
Acetone	67–64–1
Acetone cyanohydrin	75–86–5
Acetylene	74–86–2
Acrylic acid	79–10–7
Acrylonitrile	107-13-1
Adipic acid	124-04-9
Adiponitrile	111–69–3
Alcohols, C-11 or lower, mixtures	
Alcohols, C-12 or higher, mixtures	
Allyl chloride	107-05-1
Amylene	513-35-9
Amylenes, mixed	
Aniline	62-53-3
Benzene	71-43-2
Benzenesulfonic acid	98-11-3
Benzenesulfonic acid C ₁₀₋₁₆ -alkyl derivatives,	
sodium salts	68081-81-2
Benzoic acid, tech	65-85-0
Benzyl chloride	100-44-7
Biphenyl	92-52-4
Bisphenol A	80-05-7
Brometone	76-08-4
1,3-Butadiene	106-99-0
Butadiene and butene fractions	
n-Butane	106-97-8
1,4-Butanediol	110-63-4
Butanes, mixed	
1-Butene	106-98-9
2-Butene	25167-67-3
Butenes, mixed	
n-Butyl acetate	123-86-4
Butyl acrylate	141-32-2
n-Butyl alcohol	71–36–3
sec-Butyl alcohol	78-92-2
tert-Butyl alcohol	75–65–0

Chemical name	CAS No.*
Butylbenzyl phthalate	85–68–7
Butylene glycol	107-88-0
tert-Butyl hydroperoxide	75–91–2
2-Butyne-1,4-diol	110-65-6
Butyraldehyde Butyric anhydride	123–72–8 106–31–0
Caprolactam	105-60-2
Carbon disulfide	75–15–0
Carbon tetrabromide Carbon tetrachloride	558-13-4
Chlorobenzene	56–23–5 108–90–7
2-Chloro-4-(ethylamino)-6-(isopropylamino)-s-	
triazine	1912–24–9
Chloroformp-Chloronitrobenzene	67–66–3 100–00–5
Chloroprene	126-99-8
Citric acid	77–92–9
Crotonaldehyde	4170-30-0
Crotonic acid Cumene	3724–65–0 98–82–8
Cumene hydroperoxide	80-15-9
Cyanuric chloride	108–77–0
Cyclohexane	110-82-7
Cyclohexane, oxidized Cyclohexanol	68512–15–2 108–93–0
Cyclohexanone	108-94-1
Cyclohexanone oxime	100-64-1
Cyclohexene	110-83-8
1,3-Cyclopentadiene Cyclopropane	542–92–7 75–19–4
Diacetone alcohol	123-42-2
Dibutanized aromatic concentrate	
1,4-Dichlorobutene	110-57-6
3,4-Dichloro-1-butene	64037–54–3 75–71–8
Dichlorodimethylsilane	75–71–6
Dichlorofluoromethane	75–43–4
-Dichlorohydrin	96-23-1
Diethanolamine Diethylbenzene	111–42–2 25340–17–4
Diethylene glycol	111–46–6
Di-n-heptyl-n-nonyl undecyl phthalate	85-68-7
Di-isodecyl phthalate	26761-40-0
Diisononyl phthalate Dimethylamine	28553–12–0 124–40–3
Dimethyl terephthalate	120-61-6
2,4-Dinitrotoluene	121-14-2
2,4-(and 2,6)-dinitrotoluene	121-14-2
Dioctyl phthalate	606–20–2 117–81–7
Dodecene	25378-22-7
Dodecylbenzene, non linear	
Dodecylbenzenesulfonic acid	27176–87–0 25155–30–0
Dodecylbenzenesulfonic acid, sodium salt Epichlorohydrin	106-89-8
Ethanol	64-17-5
Ethanolamine	141–43–5
Ethyl acetate Ethyl acrylate	141–78–6 140–88–5
Ethylbenzene	100-41-4
Ethyl chloride	75-00-3
Ethyl cyanide	107-12-0
Ethylene Ethylene dibromide	74–85–1 106–93–4
Ethylene dichloride	107-06-2
Ethylene glycol	107-21-1
Ethylene glycol monobutyl	111-76-2
Ethylene glycol monoethyl ether Ethylene glycol monoethyl ether acetate	110–80–5 111–15–9
Ethylene glycol monomethyl ether	109-86-4
Ethylene oxide	75–21–8
2-Ethylhexanal	26266-68-2
2-Ethylhexyl alcohol(2-Ethylhexyl) amine	104–76–7 104–75–6
(2 Larymoxy) anime	104-75-0